Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 2. (Canceled)

3. (Currently Amended) The method of ~~claims 1 or 2~~any one of claims 24, 25, 26, or 27 wherein the cells in the sample are selected from the group consisting of: bacteria, spores, yeast, DNA containing viruses, and fungi.

4. (Original) The method of claim 3 wherein the bacteria are selected from the group consisting of: Bacillus anthracis, Bacillus cereus, Clostridium botulinum, Yersinia pestis, Yersinia enterocolitica, Francisella tularensis, Brucella species, Clostridium perfringens, Burkholderia mallei, Burkholderia pseudomallei, Staphylococcus species, Tuberculosis species, Escherichia coli, Group A Streptococcus, Group B streptococcus, Streptococcus pneumoniae, Helicobacter pylori, Francisella tularensis, Salmonella enteritidis, Mycoplasma hominis, Mycoplasma orale, Mycoplasma salivarium, Mycoplasma fermentans, Mycoplasma pneumoniae, Mycobacterium bovis, Mycobacterium tuberculosis, Mycobacterium avium, Mycobacterium leprae, Rickettsia rickettsii, Rickettsia akari, Rickettsia prowazekii, Rickettsia canada, Bacillus subtilis, Bacillus subtilus niger, Bacillus thuringiensis and Coxiella burnetti.

5. (Original) The method of claim 3 wherein the cells are Bacillus anthracis.

6. (Original) The method of claim 3 wherein the spores are Bacillus anthracis, Bacillus cereus, Bacillus subtilis, Bacillus subtilus niger, and Bacillus thuringiensis.

7. (Original) The method of claim 3 wherein the yeast are selected from the group consisting of: Aspergillus varieties, Mucor pusillus, Rhizopus nigricans, Candida albicans, C. parapsilosis, C. tropicalis, C. pseudotropicalis, Torulopsis glabrata, Aspergillus niger, and Candida dubliniensis.

8. (Original) The method of claim 3 wherein the fungus is selected from the group consisting of: Blastomyces dermatitidis, Coccidioides immitis, Histoplasma capsulatum, Aspergillus species, Candida species, Cryptococcus neoformans, and Sporothrix schenckii.

9. (Canceled)

10. (Currently Amended) The method of ~~claims 1 or 2~~any one of claims 25 or 27 wherein the fluorescent dye is selected from the group consisting of: acridine orange, Hoechst 33258, PicoGreen™, SYTO® 16, SYBR® Green I, Texas Red®, Redmond Red™, Bodipy® Dyes, and Oregon Green™.

11. – 12. (Canceled)

13. (Currently Amended) The method of ~~claim 12~~any one of claims 24, 25, 26, or 27 further comprising treating the sample with an agent that affects a cell membrane property of the cells.

14. (Original) The method of claim 13 wherein the agent is a detergent.

15. (Original) A kit for detecting viable cells in a sample, comprising a cell suspension solution, a fluorescent dye that can be internalized predominantly by viable cells, and instructions for detecting dye binding to cellular components of viable cells.

16. (Original) The kit of claim 15 wherein the cell suspension solution comprises a DNase.

17. (Original) The kit of claim 15 wherein the cell suspension solution comprises an agent that affects a cell membrane property of the viable cells.

18. (Original) The kit of claim 17 wherein the agent is a detergent.

19. (Original) The kit of claim 17 wherein the fluorescent dye is selected from the group consisting of: acridine orange, Hoechst 33258, PicoGreen™, SYTO® 16, SYBR® Green I, Texas Red®, Redmond Red™, Bodipy® Dyes, and Oregon Green™.

20. (Original) The kit of claim 19 wherein the fluorescent dye is SYTO® 16.

21. (Currently Amended) A kit for detecting or quantifying viable cells, comprising: instructions for detecting or quantifying viable cells, a first container containing a first solution, means for placement of a sample containing an unknown number of viable cells into a solution containing a fluorescent dye that can be internalized predominately by the viable cells and binds selectively to double-stranded DNA or other specific cellular components, whereupon its fluorescence is altered to a measurable degree, and means for illuminating the mixture of first solution with said sample with excitation light and measuring fluorescence emitted by said mixture, thereby detecting the presence of viable cells in said sample.

22. (Currently Amended) A kit for detecting or quantifying viable cells, comprising: instructions for detecting or quantifying viable cells, a first container containing a first solution, means for placement of a sample containing an unknown number of viable cells into a first solution, means for concentrating the solids and cells from the mixture of said first solution with said sample and retaining said solids from the remainder of said mixture, a second solution containing a fluorescent dye that can be internalized predominately by the viable cells

and binds selectively to double-stranded DNA or other specific cellular components, whereupon its fluorescence is altered to a measurable degree, means for mixing said second solution with said solids to form a second mixture, and means for illuminating the mixture of said second solution with said solids with excitation light and measuring fluorescence emitted by said mixture, thereby detecting viable cells in said sample.

23. (Original) The kit of claim 21 or 22 wherein the fluorescent dye in said solution is SYTO® 16.

24. (New) A method for detecting the presence of viable cells in a sample, comprising:

a) contacting a sample with a fluorescent dye that binds to target components of a viable cell, wherein said dye is internalized predominately by viable cells and has fluorescence properties that are measurably altered when bound to target components;

b) detecting total fluorescence of said sample; and

c) comparing the fluorescence detected in step (b) to the fluorescence produced by a control substance, thereby detecting viable cells, wherein the fluorescent dye is SYTO® 16.

25. (New) A method for detecting the presence of viable cells in a sample, comprising:

a) contacting a sample with a fluorescent dye that binds to target components of a viable cell, wherein said dye is internalized predominately by viable cells and has fluorescence properties that are measurably altered when bound to target components;

b) detecting total fluorescence of said sample; and

c) comparing the fluorescence detected in step (b) to the fluorescence produced by a control substance, thereby detecting viable cells, wherein the fluorescent dye binds to DNA of the cells, further comprising treating the sample with DNase before contacting the sample with the fluorescent dye.

26. (New) A method for detecting the presence of viable cells in a sample, comprising:

a) contacting a sample with a fluorescent dye that binds to target components of a viable cell, wherein said dye is internalized predominately by viable cells and has fluorescence properties that are measurably altered when bound to target components;

b) detecting total fluorescence of said sample; and

c) comparing the fluorescence detected in step (b) to the fluorescence produced by a control substance, thereby detecting viable cells, wherein the fluorescent dye is SYTO® 16, further comprising correlating the fluorescence detected in step (b) to the number of viable cells in the sample.

27. (New) A method for detecting the presence of viable cells in a sample, comprising:

a) contacting a sample with a fluorescent dye that binds to target components of a viable cell, wherein said dye is internalized predominately by viable cells and has fluorescence properties that are measurably altered when bound to target components;

b) detecting total fluorescence of said sample; and

c) comparing the fluorescence detected in step (b) to the fluorescence produced by a control substance, thereby detecting viable cells, wherein the fluorescent dye binds to DNA of the cells, further comprising treating the sample with DNase before contacting the sample with the fluorescent dye, further comprising correlating the fluorescence detected in step (b) to the number of viable cells in the sample.